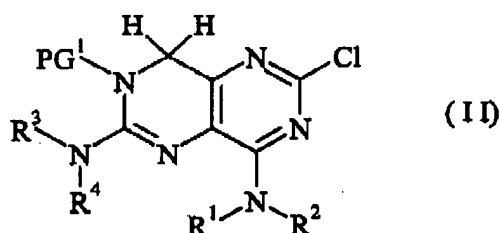


AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (original) A 2-Chloro-4,6-diamino-7,8-dihydropyrimido[5,4-*d*]pyrimidine of the formula II



wherein

R¹ denotes a hydrogen atom or a C₁-C₆ alkyl group,

R² denotes an optionally substituted C₆-C₁₀ aryl group,

R³ denotes a hydrogen atom or a C₁-C₆ alkyl group, and

R⁴ denotes a hydrogen atom or an optionally substituted C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₈ cycloalkyl or a 4- to 7-membered, nitrogen-containing heterocyclyl group, or

R³ and R⁴ together with the nitrogen atom linked to them denote an optionally substituted heterocyclyl group,

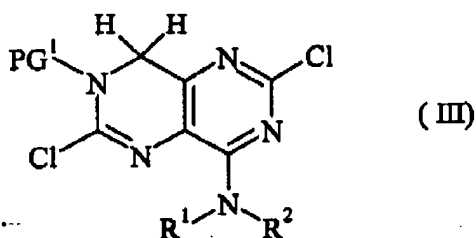
and

PG¹ denotes a C₁₋₆ alkanoyl group.

Claim 2 (original) A compound according to claim 1, wherein R¹ denotes hydrogen or methyl.

Claim 3 (currently amended) A compound according to claim 1, wherein R² denotes phenyl which may be substituted by one or two halogen atoms, particularly fluorine and/or chlorine.

- Claim 4 (original) A compound according to claim 3, wherein R^2 denotes 3-chloro-4-fluorophenyl.
- Claim 5 (original) A compound according to claim 1, wherein R^3 denotes hydrogen or methyl.
- Claim 6 (original) A compound according to claim 1, wherein R^4 denotes a 5- or 6-membered, nitrogen-containing heterocycle which may be substituted by one or two C_{1-3} -alkyl groups.
- Claim 7 (original) A compound according to claim 6, wherein R^4 denotes 1-methylpiperid-4-yl.
- Claim 8 (original) A compound according to claim 1, wherein R^3 and R^4 together with the enclosed nitrogen atom form a 5- or 6-membered, nitrogen-containing heterocycle which may be substituted by one or two groups selected from among amino, C_{1-3} -alkyl and di- $(C_{1-3}$ -alkyl)-amino- C_{1-3} -alkyl.
- Claim 9 (original) A compound according to claim 8, wherein R^3 and R^4 together with the enclosed nitrogen atom form a 5- or 6-membered, nitrogen-containing heterocycle which is substituted by an amino, methyl or diethylaminomethyl group.
- Claim 10 (original) A compound according to claim 8, wherein R^3 and R^4 together with the enclosed nitrogen atom form a 4-amino-4-methylpiperid-1-yl group.
- Claim 11 (original) A compound according to claim 1, wherein PG^1 denotes acetyl
- Claim 12 (original) A 4-amino-2,6-dichloro-7,8-dihydropyrimido[5,4-*d*]pyrimidine of the formula III



wherein

R¹ denotes a hydrogen atom or a C₁-C₆ alkyl group, and

R² denotes an optionally substituted C₆-C₁₀ aryl group,

, and

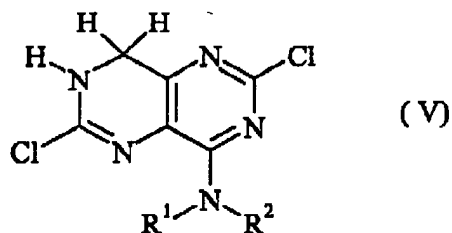
PG¹ denotes a C₁₋₆ alkanoyl group.

Claim 13 (original) A compound according to claim 12, wherein R¹ denotes hydrogen or methyl.

Claim 14 (currently amended) A compound according to claim 12, wherein R² denotes phenyl which may be substituted by one or two halogen atoms, ~~particularly fluorine and/or chlorine.~~

Claim 15 (original) A compound according to claim 12, wherein R² denotes 3-chloro-4-fluorophenyl.

Claim 16 (original) A 4-amino-2,6-dichloro-7,8-dihydropyrimido[5,4-*d*]pyrimidine of the formula V,



wherein

R¹ denotes a hydrogen atom or a C₁-C₆ alkyl group, and

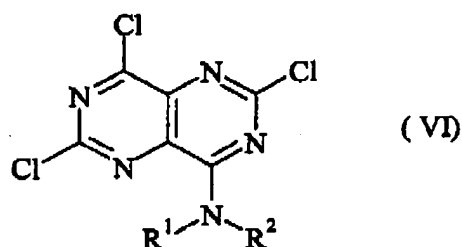
R² denotes an optionally substituted C₆-C₁₀ aryl group.

Claim 17 (original) A compound according to claim 16, wherein R^1 denotes hydrogen or methyl.

Claim 18 (currently amended) A compound according to claim 16, wherein R^2 denotes phenyl which may be substituted by one or two halogen atoms, ~~particularly fluorine and/or chlorine.~~

Claim 19 (original) A compound according to claim 16, wherein R^2 denotes 3-chloro-4-fluorophenyl.

Claim 20 (original) A 4-amino-2,6,8-trichloropyrimido[5,4-*d*]pyrimidine of the formula VI,



wherein

R^1 denotes a hydrogen atom or a C_1 - C_6 alkyl group, and

R^2 denotes an optionally substituted C_6 - C_{10} aryl group.

Claim 21 (original) A compound according to claim 20, wherein R^1 denotes hydrogen or methyl.

Claim 22 (currently amended) A compound according to claim 20, wherein R^2 denotes phenyl which may be substituted by one or two halogen atoms, ~~particularly fluorine and/or chlorine.~~

Claim 23 (original) A compound according to claim 20, wherein R^2 denotes 3-chloro-4-fluorophenyl.

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